

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Vibration and displacement damper, comprising:

a plunger piston (10) sliding inside a guiding cylinder (20) in a longitudinal direction (30),

the plunger piston comprising, over a part of a length of said plunger piston, a piston ring (12) sliding with a slight clearance inside a main chamber (13) provided in said cylinder,

said piston ring comprising calibrated through-orifices (14) for a high-viscosity fluid, such that the variations in ambient temperature have little effect on damping efficiency, the fluid filling said chamber on both sides of said piston ring,

said cylinder comprising, on either side of said main chamber (13) in the longitudinal direction, two secondary chambers (15, 16) that the plunger piston ~~pistons~~ enters,

said secondary chambers being filled, at least in part, by said high-viscosity fluid and comprising limiting means (19, 21) for limiting the passage or leakage of fluid from the main chamber toward the secondary chambers, and for facilitating the leakage of fluid from at least one of the secondary chambers toward the main chamber,

wherein said fluid has a viscosity greater than 500cSt,  
wherein the damper comprises a conduit (27) provided in  
the piston and opening (28, 29) into each of the secondary  
chambers (15, 16),

wherein the damper further comprises at least one  
through-path (17, 18) provided in the cylinder in which is  
inserted limiting means (19, 21) for limiting the passage or  
leakage of fluid from said main chamber toward the secondary  
chambers, and

wherein one of the secondary chambers contains an air  
volume (31) and is connected (27, 28, 29; 33) to the other  
secondary chamber, such that the high viscosity fluid may  
circulate freely between the two secondary chambers, and

a bore (32) provided in the guiding cylinder (20) and  
crossed by a rod (26) comprised by the plunger piston (10), which  
bore has a first end (32a) that is open to the exterior and a  
second end (32b) opening into the air volume (31), in which the  
second end (32b) is entirely enclosed.

2-5. (cancelled)

6. (previously presented) Damper according to claim 1,  
wherein said plunger piston (10) is made from chromium-plated  
steel, treated in order to harden it at the surface, and is  
guided into said cylinder (20) on bronze bearings.

7-8. (canceled)

9. (previously presented) Assembly comprising a damper according to claim 1, a vibration-damping cable and a structure to which the cable is attached, wherein the plunger piston and the cylinder are respectively connected, on the one hand, to the cable and, on the other hand, to the structure to which the cable is attached.

10. (currently amended) The damper according to claim 1, wherein the longitudinal direction (30) of the damper extends substantially vertically and the plunger piston (10) passes through a bore (32) made in the cylinder (20) and having a first end (32a) that is open to the exterior and a second end (32b) open to one (16) of the secondary chambers, said secondary chamber (16) is connected to the other secondary chamber (15) and contains [[a]] said volume (31) that is filled with air, in which said second end (32b) is entirely enclosed.

11-14. (cancelled)

15. (currently amended) Damper according to claim [[2]] 1, wherein said plunger piston (10) is made from chromium-plated steel, treated in order to harden it at the surface, and is guided into said cylinder (20) on bronze bearings.

16-20. (cancelled)

21. (currently amended) A damper according to claim 1, wherein, said limiting means (19, 21) for limiting the passage or leakage of fluid from said main chamber toward said secondary chambers are inserted to limit leakage from said main chamber (13) toward said secondary chambers (15, 16) and to facilitate leakage from said secondary chambers toward said main chamber.

22. (currently amended) A damper according to claim [[21]] 1, wherein, said limiting means (19, 21) for limiting the passage or leakage of fluid from said main chamber to said secondary chambers are non-return valves.

23. (currently amended) A damper according to claim 1, wherein, said damper absorbs stresses [[up]] in a range from 1 kN to 1000 kN.

24. (new) A damper according to claim 1, wherein the conduit (27) opens at the free end (28) of the rod (26) into the secondary chamber (15).

25. (new) A damper according to claim 1, wherein the damper is bellows free.